I. Approved requests for graduate course changes as follows:

CVEN 683. Dynamic Soil Structure Interaction. (3-0). Credit 3. Introduction to basic concepts of wave propagation; soil dynamics; applications to the design of machine foundations; geotechnical earthquake engineering. Soil effects on the characteristics of earthquake motions; liquefaction; dynamic stiffness of foundations; seismic soil structure interaction. Prerequisite: graduate standing.

FRSC 630. Introduction to Tree Improvement. (3-0). Credit 3. Study of genetic variation in forest trees and its use in tree breeding programs. Includes introductory genetics, breeding schemes, progeny testing, seed orchards and seeding productions. Prerequisite: BS in Forestry or closely related field.

FRSC 632. Forest Genetics. (3-0). Credit 3. Statistical and theoretical basis for managing the scientific aspects of a tree improvement program and an introduction to the literature. Prerequisite: FRSC 630.

FRSC 634. Plant Functional Ecology. (2-0). Credit 2. Advanced study of plant ecology and physiology with emphasis on the relationship of woody plants to the environment in ecological and evolutionary contexts. Prerequisite: RENR 205 or MEPS 313 or equivalent.

FRSC 635. Forest Biotechnology. (2-0). Credit 2. Introduction to methods and concepts important for the genetic modification of plants through biotechnology, recent developments in forest biotechnology, potential impacts of biotechnology on native species and the forest products industry. Prerequisite: course in Biology. Genetics course preferred.

FRSC 636. Forest Genetics Practicum. (0-3). Credit 3. Practical experience with tree improvement techniques including pollen collection, control pollination methods, field test establishment, orchard establishment and management, tree physiology and forest biotechnology. Prerequisite: FRSC 630, 632, 634, 635.

INFO 646. E-Services. (3-0). Credit 3. Examines the deployment and utilization of information technologies by businesses, governments and not for profit organizations to deliver services, with applications in banking and financial advisory services, healthcare, and federal, state and local governments. Prerequisite: INFO 620.
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MARB 651. Marine Biology. (2-6. Credit 4. Taxonomy, ecology and zoogeography of fishes inhabiting estuarine and marine ecosystems of the northwestern Gulf of Mexico. Particular emphasis on community structure and factors affecting spatial and temporal abundance of fishes found along the Texas coast. Prerequisite: MARB 311 or equivalent; permission of instructor.

MARB 665. Biology of Invertebrates. (3-3. Credit 4. Morphology, biology and phylogeny of invertebrates. Topics may be either detailed discussions/dissections of specific organisms or comparative information on a process. Prerequisite: MARB 435 or ZOOL 335 or equivalent; permission of instructor.

MARB 667. Biology of Marine Annelida. (3-3). Credit 4. Survey of marine annelids including their behavior, organ systems physiology, and reproduction. Emphasis on morphology and taxonomy of polychaetous annelids to enable students to more rapidly and accurately analyze benthic assemblage data. Prerequisite: MARB 435 or ZOOL 335 or equivalent; permission of instructor.

MARB 681. Seminar in Marine Biology. (1-0). Credit 1. Detailed reports on specific topics within the field of marine biology. Students may register in no more than two sections of this course in a given semester. Prerequisite: graduate standing.

MARB 684. Professional Internship. (9-0). Credit 9. On-the-job training in the field of marine biology. Prerequisite: graduate standing; instructor permission.

MARB 685. Directed Studies. (6-0). Credit 6. Limited investigations in fields other than those chosen for the thesis or dissertation topic. May be repeated for credit. Prerequisite: graduate standing; instructor permission.

MARB 689. Special Topics in. (4-0). Credit 4. Selected topics in an identified area of marine biology. Prerequisite: graduate standing; instructor permission.


MGMT 673. Advanced Research Methods in Management. (3-0). Credit 3. Introduces PhD students in Management to the multivariate methods commonly used in management research. Applications are emphasized – readings consist of journal publications. Projects and critiques are required. Prerequisite: STAT 608.
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PETE 663. Formation Evaluation and the Analysis of Reservoir Performance. (3-0). Credit 3. Current methodologies used in geological description/analysis, formation evaluation (the analysis/interpretation of well log data), and the analysis of well performance data (the design/analysis/interpretation of well test and production data); specifically, the assessment of field performance data and the optimization of hydrocarbon recovery by analysis/interpretation/integration of geologic, well log, and well performance data. Prerequisite: approval of instructor or graduate classification.

PETE 665. Petroleum Reservoir Engineering. (3-0). Credit 3. Reservoir description techniques using petophysical and fluid properties; engineering methods to determine fluids in place, identify production-drive mechanisms, and forecast reservoir performance; implementation of pressure-maintenance schemes and secondary recovery. Prerequisite: instructor approval or graduate classification.

PHIL 641. Mathematical Logic I. (3-0). Credit 3. The metatheory of prepositional and first-order logic: definitions of formal languages for these systems, their proof theory, model theory, and demonstrations of their soundness and completeness. The course begins with an overview of the basic elements of set theory, including functions and relations, infinite sets, infinite cardinal numbers, and Cantor’s Theorem. Prerequisite: graduate standing or permission of instructor.

PLAN 647. Disaster Recovery and Hazard Mitigation. (3-0). Credit 3. Interdisciplinary study of the impacts of environmental disasters; describes process of disaster recovery and examines methods of reducing future vulnerability; analyzes regulation, market mechanisms, and public education as methods for implementing mitigation measures. Prerequisite graduate classification.

PLAN 673. Design for Sustainable Transportation. (3-0). Credit 3. Introduce planning and design principles, techniques, and examples for achieving sustainable transportation; main topics: transit-oriented development, neo-traditional design, traffic calming, non-motorized travel, and smart growth; other topics: car sharing, parking pricing, location efficient mortgage, and alternative vehicles and fuel technologies. Prerequisite: graduate classification.

RENR 650. Leadership Development and Management of Environmental NGOs. (3-0). Credit 3. Trends and increasing power of NGOs in environment and sustainable development: Understanding of the organizational structures, functions, planning and management processes of environmental NGOs; technical skills and leadership qualities for careers with environmental NGOs. Prerequisite: graduate classification.
WFSC 621. Aquatic Ecology. (3-0). Credit 3. This course explores aquatic ecosystems from a system-level perspective by acquainting students with contemporary models of ecosystem structure and function; after an introduction to nonlinear dynamics and chaos theory, aquatic ecosystem behavior and predictability as a functional food-chain length are discussed. Prerequisite: none.

II. Change in Title and Description:

A. Request for Change in Course Title:

FROM: PHIL 642 – Mathematical Logic. (3-0). Credit 3. Axiomatic formal theories and their models; model theory in prepositional, modal logic and its philosophical bases; metatheorems and the Lowenheim-Skolem Theorem. Prerequisite: PHIL 341.

TO: PHIL 642 – Mathematical Logic II. (3-0). Credit 3. Continuation of PHIL 641: Compactness, The Lowenheim-Skolem Theorems, computability theory and Church’s thesis, formal arithmetic, Godel’s Incompleteness Theorems, Tarski’s Theorem, and Church’s Theorem. Other topics covered in the course might include systems of modal logic, intuitionistic logic, and more advanced issues in set theory. Prerequisite: 641 or approval of instructor.

B. Request for Change in Course Title:

FROM: BIOL 672 – Molecular Biology of Photosynthesis. (1-0). Credit 1. Structure, function, and regulation of the photosynthetic apparatus of a variety of photosynthetic systems, including plant chloroplasts, cyanobacteria, and purple and green photosynthetic bacteria; emphasis on regulation of expression of genes that encode photosynthetic membrane components.

TO: BIOL 672 – Molecular Biology of Photosynthesis and Light Signal Transduction. (3-0). Credit 3. Structure, function, and regulation of the photosynthetic apparatus of a variety of photosynthetic systems, including plant chloroplasts, cyanobacteria, and purple and green photosynthetic bacteria; Photoreceptors involved in metabolic and developmental control in photosynthetic organisms.

C. Request for Change in Course Grading:

FROM: BICH 673 (Gene Expression) (1-0). Credit 1. and GENE 673 (Gene Expression) (1-0). Credit 1. grading as Satisfactory/Unsatisfactory.

TO: BICH 673 – Gene Expression (1-0). Credit 1. and GENE 673 (Gene Expression) (1-0). Credit 1. grading to a letter-grading basis.
D. Request for Cross Listing:
   MARB 665 Biology of Invertebrates TAMUG with ZOOL 665 and MARB 667
   Biology of Marine Annelida TAMUG with ZOOL 667 at Texas A&M

E. Request for Cross Listing and Change in Course Inventory:
   BIOL 650 Genomics with BICH 650 Genomics.
   BIOL 650 (2-0). Credit 2. be changed to BIOL 650 (3-0). Credit 3.